ecember 1984 « X I L O G » Price 1.00 free to members

THE OFFICIAL NEWSLETTER OF THE AUCKLAND VZ-200 USERS GROUP

# CHRISTMAS ISSUE

## *Introduction*

Welcome to this , the first issue of 'XIIOG' .I have just been looking through the finished product and I must say it looks very impressive , which reflects the ammount of effort and time that has gone into it . So since we've got off to such a good start please keep the input rolling in .

Regarding the contents of this issue there is a lot of very important information inside regarding the various sections of 'XIIOG' , so please hang onto it for future reference since repeating it in every issue would be a waste of time and space .

I'll take this opportunity to officially announce the committee .

PRESIDENT-Julian Bish
22 Ussher Place,
Pakuranga,
AUCKLAND ph-562-166

SECRETARY-Lyall Taverner
3/399a Ellerslie/Panmure Highway
Panmure,
AUCKLAND ph-592-009

TREASURER-Marc Atkinson
7/27 Pakuranga Road
Pakuranga,
AUCKLAND ph-562-665

One thing that I have noticed over the last month or so is the growing knowledge that we exist by computer enthusiasts throughout New Zealand (and we need all the publicity we can get) which pleases me greatly since I (and I'm sure you too) would like to see this club really get off the ground and become one of the major computer clubs of New Zealand .

Well I'll stop bragging now and let you get on with the Christmas '84 issue of 'XIIOG' .

J BISH (president)

# CHRISTMAS PROGRAM

```
10 REM CHRISTMAS MUSIC BOX
20 REM CHRISTMAS 1984
30 REM INTRO
40 REM WRITE MERRY CHRISTMAS
44 MODE(1):FOR Q=4 TO 1 STEP-1 :COLOR Q):RESTORE
45 FORT=1TO238
50 READX:READY
60 SET(X,Y)
70 NEXT T
200 REM DRAW TREE
205 COLOR2,1
210 SET(14,2):SET(13,3):SET(14,3):SET(15,3)
220 FORX=12TO16:SET(X,4):NEXT
230 FORX=11TO17:SET(X,5):NEXT
240 FORX=10TO18:SET(X,6):NEXT
250 FORX=12TO16:SET(X,7):NEXT
260 FORX=11TO17:SET(X,8):NEXT
270 FORX=10TO18:SET(X,9):NEXT
280 FORX=9TO19:SET(X,10):NEXT
290 FORX=8TO20:SET(X,11):NEXT
300 FORX=12TO16:SET(X,12):NEXT
310 FORX=11TO17:SET(X,13):NEXT
320 FORX=10TO18:SET(X,14):NEXT
330 FORX=9TO19:SET(X,15):NEXT
340 FORX=8TO20:SET(X,16):NEXT
350 FORX=7TO21:SET(X,17):NEXT
360 FORX=6TO22:SET(X,18):NEXT
370 FORX=12TO16:SET(X,19):NEXT
380 COLOR3,1
390 FORX=10TO18:SET(X,20):NEXT
400 FORX=11TO17:SET(X,21):NEXT
410 FORX=12TO16:SET(X,22):NEXT
1000 FORT=1TO10000:NEXT
10000 REM DATA FOR WRITING MERRY
10010 DATA8,43,9,43,9,42,9,41,9,40,8,39,8,38,8,37,7,36,7,35,7,34
10020 DATA7,33,7,32,8,31,9,32,10,33,11,35,11,34,11,33,11,32
10030 DATA11,31,11,30,11,29,12,28,13,27,14,28,14,29,15,30,15,31
10040 DATA16,32,16,33,16,34,17,35,17,36,17,37,18,38,19,39,20,39
10050 DATA21,38,22,37,22,36,22,35,22,34,21,33,21,32,22,31,23,32
10060 DATA23,33,23,34,23,35,24,36,25,35,26,34,27,33,27,32,28,31
10070 DATA28,30,28,29,28,28,29,29,29,31,30,32,32,30,31,29,30,28
10080 DATA30,27,31,26,32,27,33,27,34,26,34,25,35,26,35,25,33,24
10090 DATA36,27,36,28,37,27,37,26,38,25,38,24,38,23,38,22,38,21
10100 DATA40,23,40,24,41,25,41,26,42,27,42,28,42,29,42,30,43,28
10110 DATA43,29,44,30,44,31,45,32,45,33,45,34,45,35,44,36,43,37
10120 DATA42,36,41,35,41,34,41,33,41,32,41,31,43,26,44,25,45,24
11010 DATA37,46,36,46,35,45,34,46,33,47,33,48,34,49,34,50,34,51
11020 DATA34,52,35,53,35,54,36,55,37,56,38,56,39,56,40,56,41,55
11030 DATA42,55,43,54,43,53,43,52,44,51,44,50,44,49,44,48,44,47
11040 DATA44,46,44,45,44,44,44,43,44,42,45,44,45,45,46,46,46,47
11050 DATA47,48,47,49,47,50,47,51,48,47,49,46,50,47,51,48,51,49
11060 DATA52,49,53,48,54,47,54,46,54,45,54,44,54,43,55,46,56,47
11070 DATA55,44,56,44,57,44,58,44,59,43,59,42,59,41,59,39,60,42
11080 DATA61,43,62,42,63,41,63,40,64,40,64,39,64,38,65,38,66,38
11090 DATA66,37,67,38,67,39,66,40,68,38,69,37,69,36,69,35,69,34
11100 DATA69,33,69,32,69,31,69,30,70,31,68,32,70,37,71,36,71,35
11110 DATA72,34,72,33,73,32,74,34,74,33,74,32,74,31,75,30,76,31
11120 DATA77,30,78,29,79,30,80,31,81,30,82,29,82,28,83,28,83,27
11130 DATA83,26,83,25,83,24,82,25,81,26,81,27,82,28,84,29,85,28
11140 DATA86,27,87,26,87,25,88,24,88,23,89,22,90,23,91,24,91,25
11150 DATA90,26,89,26
12000 NEXT Q
15000REM MUSIC
15100SOUND21,1;26,2;26,1;28,1;26
,1;25,1;23,2;19,2;23,2;:COLOR,0
15110SOUND28,2;28,1;30,1;28,1;26
,1;25,2;21,2;21,2:COLOR,1
15120SOUND30,2;30,1;31,1;30,1;28
,1;26,2;23,2;21,2;23,2;28,2;25,2
15130 SOUND26,6
16000REM FINAL DELAY
16010 FORE=1TO2000:NEXTE
```

This program writes, in hand writing style ,'MERRY CHRISTMAS' sloping across the screen .Then it draws a christmas tree and goes through a series of colour changes and finally it plays a familiar tune.

There are many possibilities as far as using this as a sub-routine goes .I'll leave that up to your imagination.

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CAN YOU BRING YOUR COMPUTER &/OR YOUR V.D.U TO MEETINGS???

If you can then please contact Julian Bish on 562-166.

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NEW SOFTWARE CASSETTES FOR THE VZ

There are now three new editions to the range of software cassettes

WORDPROCESSOR

OTHELLO

CHESS(6levels)

if you have any of these then please send us your views on them.

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$$$$$$MEMBERSHIP$$$$$FEES$$$$$$$$$

If you are not a financial member yet then please give us your subs sometime soon.We want to tie up the membership fees before Christmas. Send to any member of the committee

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*Program Of The Month!*

# SHOOTOUT

by S.Southon

```
10 CLEAR10:CLS:PRINT@225,"HAVE YOU A COLOUR OR B/W T.V.?"
20 A$=INKEY$:IFA$="C"THENCOLOR,1ELSEIFA$="B"THENCOLOR,0ELSE20
50 MODE(1):A=28726+RND(30):B=30464+RND(26):D=32:G=32
56 P=0:R=0:V=32:Q=32:IFP1()0FORX=1TOP1:T=28672+X:GOSUB3130:NEXT
58 IFP2()0FORX=1TOP2:T=30591-X:GOSUB3130:NEXT
60 X=28961+RND(6)*32+RND(12):GOSUB500:POKEX+263,170
61 POKEX+264,160
70 POKEA,20:POKEA+32,85:POKEA+64,20:POKEA+96,85:POKEA+128,215
72 POKEA+160,20:POKEA+192,20:POKEB+160,60:POKEB+192,60
74 POKEB,60:POKEB+32,255:POKEB+64,60:POKEB+96,255:POKEB+128,125
80 X=29707+RND(5)*32+RND(6):GOSUB500:POKEX+254,42:POKEX+255,170
85 X=29567+RND(16)*32+RND(7):Y=28985+RND(4)+RND(40)*32
87 FORC=0TO288STEP32:READH,E,F:POKEX+C,H:POKEY+C,H:POKEX+C+1,E
89 POKEY+C+1,E:POKEX+C+2,F:POKEY+C+2,F:NEXT
100 IFPEEK(28416)=0THEN250
110 IFPEEK(26875)AND8ELSEIFA+1<30496GOTO300
120 IFPEEK(26875)AND2ELSEIFA-1>28671THEN310
130 IFPEEK(26875)AND16ELSEIFA+32<30464THEN320
140 IFPEEK(26877)AND16ELSEIFA-32>28694THEN330
150 IFPEEK(26877)AND4ELSEIFP=0THEN700
200 IFPEEK(26863)AND2ELSEIFB-1>28671THEN400
210 IFPEEK(26863)AND16ELSEIFB+1<30496THEN410
220 IFPEEK(26863)AND8ELSEIFB+32<30464THEN420
230 IFPEEK(26751)AND8ELSEIFB-32>28694THEN430
240 IFPEEK(26751)AND32ELSEIFR=0THEN800
250 IFP=0THEN270ELSEPOKEP,0:FORU=1TOL:P=P+V
260 IFP<28672ORP>30719ORINT(P/32)=P/32THENP=0:GOTO270
262 IFINT((P+1)/32)=(P+1)/32THENP=0:GOTO270
264 IFPEEK(P)=0THENNEXT:POKEP,60:GOTO270
265 W=PEEK(P):P=0
266 IF(WAND192)=192OR(WAND48)=48OR(WAND12)=12OR(WAND3)=3THEN2000
270 IFR=0THEN100ELSEPOKER,0:FORU=1TOK:R=R+Q
280 IFR<28672ORR>30719ORINT(R/32)=R/32THENR=0:GOTO100
282 IFINT((R+1)/32)=(R+1)/32THENR=0:GOTO270
284 IFPEEK(R)=0THENNEXT:POKER,20:GOTO100
285 W=PEEK(R)
286 IF(WAND192)=64OR(WAND48)=16OR(WAND12=4)OR(WAND3)=1THEN1000
290 R=0:GOTO100
300 IFINT((A+1)/32)=(A+1)/32THEN200
302 FORX=0TO192STEP32:POKEA+X,0:NEXT:A=A+1:D=1
304 F=0:FORX=0TO192STEP32:IFPEEK(X+A)()0THENF=1
305 NEXT:IFF=1THENA=A-1
306 POKEA,20:POKEA+32,85:POKEA+64,20:POKEA+96,16
308 POKEA+128,23:POKEA+160,16:POKEA+192,20:GOTO200
310 IFINT(A/32)=A/32THEN200ELSEFORX=0TO192STEP32:POKEA+X,0:NEXT
311 A=A-1:D=-1:F=0:FORX=0TO192STEP32:IFPEEK(X+A)()0THENF=1
312 NEXT:IFF=1THENA=A+1
313 POKEA,20:POKEA+32,85:POKEA+64,20:POKEA+96,4
314 POKEA+128,212:POKEA+160,4:POKEA+192,20:GOTO200
320 POKEA,0:POKEA+32,0:A=A+64:D=32
321 IFPEEK(A+192)()0ORPEEK(A+160)()0THENA=A-64
322 POKEA,20:POKEA+32,85:POKEA+64,20:POKEA+96,85:POKEA+128,215
324 POKEA+160,20:POKEA+192,20:GOTO200
330 POKEA+192,0:POKEA+160,0:A=A-64:D=-32
331 IFPEEK(A)()0ORPEEK(A+32)()0THENA=A+64
332 POKEA,20:POKEA+32,85:POKEA+64,20:POKEA+96,85:POKEA+128,85
334 POKEA+160,20:POKEA+192,20:GOTO200
390 F=0:FORX=0TO192STEP32:IFPEEK(X+A)()0THENF=1:NEXT:RETURN
400 IFINT(B/32)=B/32THEN250ELSEFORX=0TO192STEP32:POKEB+X,0:NEXT
405 B=B-1:G=-1:F=0:FORX=0TO192STEP32:IFPEEK(X+B)()0THENF=1
406 NEXT:IFF=1THENB=B+1
407 POKEB,60:POKEB+32,255:POKEB+64,60:POKEB+96,12
408 POKEB+128,124:POKEB+160,12:POKEB+192,60:GOTO250
410 IFINT((B+1)/32)=(B+1)/32THEN250
411 FORX=0TO192STEP32:POKEB+X,0:NEXT:B=B+1:G=1
412 F=0:FORX=0TO192STEP32:IFPEEK(X+B)()0THENF=1
413 NEXT:IFF=1THENB=B-1
414 POKEB,60:POKEB+32,255:POKEB+64,60:POKEB+96,48
415 POKEB+128,61:POKEB+160,48:POKEB+192,60:GOTO250
420 POKEB,0:POKEB+32,0:B=B+64:G=32
421 IFPEEK(B+192)()0ORPEEK(B+224)()0THENB=B-64
422 POKEB,60:POKEB+32,255:POKEB+64,60:POKEB+96,255:POKEB+128,125
424 POKEB+160,60:POKEB+192,60:GOTO250
430 POKEB+192,0:POKEB+160,0:B=B-64:G=-32
431 IFPEEK(B)()0ORPEEK(B+32)()0THENB=B+64
432 POKEB,60:POKEB+32,255:POKEB+64,60:POKEB+96,255:POKEB+128,255
434 POKEB+160,60:POKEB+192,60:GOTO250
500 RESTORE:FORC=XTOX+6:POKEC,170:POKEC+224,170:POKEC+256,170
502 NEXT:FORC=X+32TOX+192STEP32:READF,H:POKEC,F:POKEC+6,H:NEXT
503 DATA128,2,32,8
504 DATA32,8,8,32,8,32,8,32,170,160,42,170,168,10,170,42,130,10
506 DATA170,160,130,168,,32,32,,8,8,,,10,128,,2,160,0
508 FORC=9TO12:FORH=0TO6:READE:POKEX+H+C*32,E:NEXT:NEXT
510 RETURN
600 DATA0,40,,160,40,,160,40,,170,168,10,42,168,10,,42,170,0
610 DATA42,168,,42,,,42,,,42,0
620 DATA136,168,168,32,168,32,168,168,10,138,138,138,130,10,138
630 DATA136,32,32,8,136,128,32,136,8,136,8,2,8,136,130
640 DATA168,32,32,,168,,32,136,10,138,10,130,10,138,130
650 DATA136,32,32,,160,,32,136,10,8,,130,8,138,2
660 DATA136,168,32,,136,,32,168,8,138,138,130,8,136,130
700 V=D:P=A+128+V:IFV=32THENP=P+64ELSEIFV=-32THENP=P-128
702 IFABS(V)=32THENL=6ELSEL=4
705 IFP<28672ORP>30719ORINT((P+1)/32)=(P+1)/32THENP=0:GOTO270
710 IFINT(P/32)=P/32THENP=0:GOTO200
720 IFPEEK(P)=0THENPOKEP,60:GOTO200
730 W=PEEK(P)
740 IF(WAND192)=192OR(WAND48)=48OR(WAND12)=12OR(WAND3)=3THEN2000
750 P=0:GOTO200
800 Q=G:R=B+128+Q:IFQ=32THENR=R+64ELSEIFQ=-32THENR=R-128
802 IFABS(Q)=32THENK=6ELSEK=4
805 IFR<28672ORR>30719ORINT(R/32)=R/32THENR=0:GOTO250
810 IFINT((R+1)/32)=(R+1)/32THENR=0:GOTO250
820 IFPEEK(R)=0THENPOKER,20:GOTO250ELSEW=PEEK(R)
840 IF(WAND192)=64OR(WAND48)=16OR(WAND12=4)OR(WAND3)=1THEN1000
850 R=0:GOTO250
1000 FORX=A TOA+128STEP32:POKEX,0:NEXT
1005 IFPEEK(A+129)()0ORPEEK(A+161)()0ORPEEK(A+193)()0THENA=A-1
1030 POKEA+128,3:POKEA+161,16:POKEA+160,65:POKEA+192,85
1035 POKEA+193,84:T=A+1:GOSUB3000
1040 P1=P1+1:GOSUB3130:IFP1=3THEN10000ELSE50
2000 FORX=B TOB+128STEP32:POKEX,0:NEXT
2005 IFPEEK(B+129)()0ORPEEK(B+161)()0ORPEEK(B+193)()0THENB=B-1
2030 POKEB+128,1:POKEB+160,51:POKEB+161,12:POKEB+192,255
2035 POKEB+193,252:T=B+1:GOSUB3000:P2=P2+1:IFP2=3THEN10000ELSE50
3000 YY=0:G=0:F=0:GOSUB3100:SOUND4,5:GOSUB3110:SOUND4,4
3010 GOSUB3100:SOUND4,1:GOSUB3110:SOUND4,5:GOSUB3100:SOUND7,4
3020 GOSUB3110:SOUND6,1:GOSUB3100:SOUND6,4:GOSUB3110:SOUND4,1
3030 GOSUB3100:SOUND4,4:GOSUB3110:SOUND2,1:GOSUB3100:SOUND4,6
3050 GOSUB3110:RETURN
3100 IFPEEK(T-33)=0ANDPEEK(T-32)=0AND(T-33)>28671THEN3105
3101 IFF()0THEN3112
3102 F=1:IFPEEK(T+1)=0GOTO3115ELSEF=2:GOTO3115
3105 IFF()0THEN3112ELSET=T-33:GOTO3120
3110 IFF=0THENT=T+1:GOTO3120
3112 IFF=2THEN3120
3115 G=G+1:IFINT(G/2)=G/2THENT=T+1ELSET=T-1
3120 FORM=YYTOYY+128STEP32:POKEM,0:NEXT
3130 POKET,32:POKET+32,168:POKET+64,32
```

```
3140 POKET+96,32:POKET+128,32:YY=T:RETURN
10000 FORZ=YYTOYY+128STEP32:POKEZ,0:NEXT
10005 IFP1=3THENT=28675:GOSUB3130ELSET=30588:GOSUB3130
10010 IFP2=3THENT=B+123ELSET=A+128
10020 Y=INT((T-28672)/32):X=(T-28672-Y*32)*4:FORYY=YTOY+2
10030 FORXX=XTOX+6:RESET(XX,YY):SOUNDXX-X+(YY-Y)*6,1:NEXT:NEXT
10040 FORB=0TO4:FORA=28681TO28695:READD:POKEA+B*32,D:NEXT:NEXT
10050 POKE28696,128
10060 A$=INKEY$:IFA$="R"THENRUN 50ELSE10060
```

In this two-player game you must move your man around the screen and shoot your opponent 3 times to win.
Left player uses 'Q' up 'Z' down 'CTL' fire 'X' left 'C' right.
Right player uses 'K' up ',' down 'J' fire '.' left 'SPACE' right.

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# *Mailbag*

This is the section of 'XILOG' in which we feature material other than programs.(i.e.articles subroutines helpful hints etc)The reason for the title 'MAILBAG' is that contributions to this section usually are in the form of a letter.

## LINE RESTRUCTURE ROUTINE

by Graeme Ross

This routine rearranges a string so that a word is not split between two lines .The string may be as long as 236 characters.

```
5 REM LINE RECON
10 CLS:CLEAR1000
20 QT$="ABCDEF GHIJKL MNOPQR ASDRF HHHHHHHHKK HHGGHHGJG"
100 REM LINE RESTRUCTURE ROUTINE        ========================
110 PRINT@0,QT$:K=0:SP$="                "                '15 CHR
120 SP%=100:LQ=LEN(QT$)
130 IFK*32+32)=LQTHEN1000
140 FORCH=1TO32
150 IFMID$(QT$,CH+(K*32),1)()" "THEN170
160 IF((K*32)+32)-(CH+(K*32))(SP%THENSP%=CH+(K*32)
170 NEXTCH
199 REM QT$ DIVIDED INTI 2-PARTS
200 LT$=LEFT$(QT$,SP%)
210 RT$=RIGHT$(QT$,LQ-SP%)
220 QT$=LT$+LEFT$(SP$,K*32+32-SP%)+RT$
230 K=K+1:GOTO120
299 REM*************************
1000 PRINT@0,QT$;:PRINT
1099 REM*************************
```

Thanks Graeme ,I'm sure many of our members will find your routine very useful, especially where a lot of text is used e.g instructions for game s etc.

## HI-RES GRAPHICS ON THE VZ-200

There have been many rumours circulating concerning higher resolution graphics on the VZ.(i.e 128x96)pixels.Here is an extract from 'circuit ideas' in E:A sent to us by David Crandall of Paeroa.

'Inside the VZ-200 is MOTOROLA'S MC6847 video display generator (VDG) chip.It offers a number of text/graphic modes.As standard , the VZ-200 comes with 128x64 dot 4colour graphic mode. In this mode, each display byte is split into 4 dots , each occupying two bits. The two bits specify which of the four colours the dot is in , one of two sets making 8 colours available in all.

By cutting the track linking pin 30 of U15 (the VDG) to ground and then connecting this pin to +5v(pin 17) , a new graphics mode is derived. This mode offers 128x96 dot monochrome (i.e.two colour) graphics ,where one bit specifies one dot and requires 1.5k of RAM. the advantage of this mode is that dots are square which improves plot appearance .A single 2 position switch (which can be mounted on the side of the case) can be used to switch between the two modes. NOTE:- if more RAM is decoded directly above the exsisting 2K video RAM, it should be possible to get up to 80x24 text and 256x192 graphics resolution in 16 colours (depending on RAM).'

---

Thanks David, the only problem is which pins are which (they don't appear to be numbered). If anyone out there has made the modification or has more info on it then please let us know .

## TRY THIS

Trace function:as the computer executes the program it prints on the screen the line number that it is presently executing.
TRACE ON:-POKE31003,175
TRACE OFF-POKE31003,0

this can be entered with or without a line number.

# News

This is where the club will put any announcements or news that you , as members should know about.

APOLOGIES; If you are a financial member (non-correspondance) then please let me know if you cannot attend a meeting.The reason being that we will be h anding out the copies of 'XILOG' at the meetings and I will know to send you out a copy. PH:562-166

ALTERATION OF FEES:As of now the membership fee for a correspondan ce member for 1 yr is $10:00 regardless of age.

MEETINGS:All our meetings will be held at the'general purpose rm', Anchorage Park School ,Swan Cres Pakuranga starting at 7:30pm on the 1st Tuesday of every month unless you are otherwise notified

MEMBERS:We need more members .If you know anyone with a VZ-200 then please get them to give me a ring so that we can send them out some info. PH:592-009

LOST PROPERTY:Nobody has claimed the 'LEARJET' instruction book that has been found .If it is yours then phone me (562166)

1st BOOK OF PROGRAMS:My copy of '1st Book Of Programs ' is missing. Please check that you have not picked it up by mistake,if you have then I do want it back. JULIAN BISH(562-166)

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# Buy « Sell » Exchange

This section gives you the opportunity to advertise , free of charge .Anything you want to buy, sell or exchange or any announcements you want published, not necessarily to do with computers.

# Contributions?

We need more PROGRAMS,ARTICLES, SUBROUTINES and general contribu tions.If you have something to offer 'XILOG' (anything will be considered) then please follow the following guidelines to ensure that it goes to the right person.

- do not phone in contributions
- contributions may be left at m-eetings or be sent in.
- contributions must be placed in an envelope with your name and ph no on the front as well as the section of Xilog that it is intended for.(i.e MAILBAG etc)
- listings should be supplied if possible as well as cassette for programs.
- programs should be saved at least 3 times in case of loadin g error.Please state the brand of 'datasette' used.
- If you are not the author of a contribution you send into 'Xilog' then please make it clear who is and please make sure that we have permission to publish it.
- Cassette tapes will be returned
- The Auckland VZ-200 Users Group will not be held responsible for the breeching of copyright caused by the publication of any material sent in under a false name.(in other words dont send us a program that is under a copyright)
- Contributions may also be sent to either THE PRESIDENT
  THE AUCKLAND VZ-200
  USERS GROUP
  22 USSHER PL,
  PAKURANGA

  or THE SECRETARY
  THE AUCKLAND VZ-200
  USERS GROUP
  3/399a ELL'S PNMRE
  H'WAY
  PANMURE

please do not be put off by this long list of guidelines and do keep sending in material

After all, the output of this magazine only reflects what you put into it.